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(12) **United States Patent**  
**Gardner**(10) **Patent No.:** US 6,610,274 B1  
(45) **Date of Patent:** Aug. 26, 2003(54) **ANTI-INFLAMMATORY COMPOSITION  
COMPRISING TETRACYCLINE**(76) Inventor: **Wallace J. Gardner**, 1791 Mass Ave.,  
Cambridge, MA (US) 02140(\*) Notice: Subject to any disclaimer, the term of this  
patent is extended or adjusted under 35  
U.S.C. 154(b) by 0 days.(21) Appl. No.: **10/023,017**(22) Filed: **Dec. 18, 2001****Related U.S. Application Data**(60) Provisional application No. 60/258,027, filed on Dec. 22,  
2000.(51) **Int. Cl.<sup>7</sup>** ..... A61K 7/16; A61K 31/65(52) **U.S. Cl.** ..... 424/49; 514/152(58) **Field of Search** ..... 514/152; 424/49-58(56) **References Cited****U.S. PATENT DOCUMENTS**

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Therapeutic composition having anti-infective activity. The therapeutic composition is a formulation comprising an antibiotic, preferably a tetracycline, most preferably doxycycline, which has not been chemically modified to eliminate antimicrobial efficacy. The antibiotic is preferably in a liquid vehicle, most preferably one that contains at least 20% alcohol by volume. The therapeutic composition is preferably in local delivery form and is self-administered orally or via the nasal cavity. Administration of the therapeutic composition of the present invention treats diseases that originate from the oral cavity or that do not originate in the oral cavity, but are affected by contaminants, such as viruses or bacteria, in the oral cavity entering the bloodstream including but not limited to periodontal disease, sinusitis, gingivitis, the common cold, sore throat, influenza, allergies (particularly to tree pollen), resistant pneumonia, diseases of the gastrointestinal tract, inflammatory diseases such as rheumatoid arthritis, cancer, ulcers, heart disease, etc.

**1 Claim, No Drawings**